

EXPRESS MAIL NO.: EM 489547290 US

MAILED: 19 March 1999

Patent Docket P1268R1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of de Sauvage et al. Serial No.: To be assigned Filed: 19 March 1999 For: GFRalpha3 and Its Uses	Group Art Unit: To be assigned Examiner: To be assigned
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cs49 U.S. PTO
09/27/99
03/19/99

CERTIFICATE RE: SEQUENCE LISTING

RESPONSE UNDER 37 CFR § 1.821(f)

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

I hereby state that the Sequence Listing submitted herewith is submitted in paper copy and a computer-readable diskette, and that the information recorded in computer readable form is identical to the written sequence listing.

Respectfully submitted,

GENENTECH, INC.

Date: March 19, 1999

By: Timothy E. Torchia
Timothy E. Torchia, Ph.D.
Reg. No. 36,700

1 DNA Way
So. San Francisco, CA 94080-4990
Phone: (650) 225-8674
Fax: (650) 952-9881

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/272,835

DATE: 03/31/1999
TIME: 13:59:50

Input Set: I272835.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Robert D. Klein
2 Arnon Rosenthal
3 Heidi S. Phillips
4 Frederic J. de Sauvage
5 <120> TITLE OF INVENTION: GFRalpha3 and its Uses
6 <130> FILE REFERENCE: P1268R1
7 <140> CURRENT APPLICATION NUMBER: US/09/272,835
8 <141> CURRENT FILING DATE: 1999-03-19
9 <150> EARLIER APPLICATION NUMBER: US 60/079,124
10 <151> EARLIER FILING DATE: 1998-03-23
11 <150> EARLIER APPLICATION NUMBER: US 60/081,569
12 <151> EARLIER FILING DATE: 1998-04-13
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RAW SEQUENCE LISTING
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109           35               40               45
110      Thr Gly Ala Val Val Val Ala Ala Thr Trp Ser Arg Lys Leu Pro
111           50               55               60
112      Cys His Arg Glu Gln Val Cys Glu Gln Leu Tyr Pro Gly Gln Lys
113           65               70               75
114      Glu Met Arg Gly Ser Arg Leu Gln Gly Cys Leu Pro Ala Pro Gly
115           80               85               90
116      Leu Leu His Leu Gln Phe Lys Gln Ala Ala Ala Leu Arg Gly Val
117           95              100             105
118      Cys His Val Cys Arg Leu Pro Arg Gly Ser Arg Thr Thr Gln Glu
119          110             115             120
120      Gln Leu Ser Asp Arg Leu Gln Val Pro Ser Ala His Glu Ala Pro
121          125             130             135
122      Ser Tyr Leu Ser Gly His Leu Leu Asp Arg Ser Pro Cys Pro Lys
123          140             145             150
124      Pro Trp Leu Arg Val Gly Cys Leu Thr Leu Arg His Ser Asp Gln
125          155             160             165
126      Gln Thr Leu Glu Lys Ser Gln Val Glu His Ala Gln Thr Arg Leu
127          170             175             180
128      Gly Pro Leu Pro Gln Ile Cys Tyr Ala Val Tyr Ser Ser Arg Gln
129          185             190             195
130      Val Pro Pro Ala Gln Gly Leu Arg Gly Gly Met Leu Arg Asp Pro
131          200             205             210
132      Leu Pro Ala Pro Pro Leu Pro Ser Pro Ala Ala Leu Leu Leu Glu
133          215             220             225
134      Gly Ser Arg Val Pro Arg Ser Gly Ser Ala Ala Val Ser Leu Cys
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137          245             250             255
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139          260             265             270
140      Glu Leu Leu Pro Cys Gly Pro Phe Val Gln Ile Thr Pro Asp Gly
141          275             280             285
142      Leu Pro Asp Pro Leu Ser Ser Tyr Gly His Pro Trp Asp Leu Cys
143          290             295             300
144      Asn Ala Val Gln Met Ser Ala Gly Ile Pro Gly Ala Asp Trp Asp

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148	Leu Lys Leu His Leu Pro Arg Gln Arg Gln Pro Thr Gly Arg Val					
149		335		340		345
150	Thr Ala Gly Lys Val Leu Leu Pro Glu Pro Leu Pro Arg Gly Gly					
151		350		355		360
152	His Cys Ser Asp Ala Phe Pro Gln Thr Ala Leu Leu Pro Gly Leu					
153		365		370		375
154	Gly Arg Leu Tyr Phe Phe Ser Gly Ala Ala Ala Glu Gln Gln Pro					
155		380		385		390
156	Cys Ser Glu Thr Ala Ala Gln Ala Thr His Ser Phe Phe Leu His					
157		395		400		405
158	Pro Ser Leu Asp Ser Ala Ala Asp Pro Leu Val Ala Gly Leu Pro					
159		410		415		420
160	Gln Gly Pro Leu Ser Ser Pro Pro His Pro Asp Phe Ala Ala Cys					
161		425		430		435
162	Gly Gly Arg Glu Leu Ala Ser Leu Trp Lys Lys Thr Gln Arg Ala					
163		440		445		450
164	Thr Gln Gln Pro Gly Thr Asn Gln Ala Phe Arg Ser Thr Ser Arg					
165		455		460		465
166	Leu Leu Gln Lys Arg Ser Lys Gly Leu Pro Phe Arg Ser Ala Ala					
167		470		475		480
168	Ser Phe Gln Thr Ser Leu Ala Pro Ala Ser Phe Trp Leu Arg Leu					
169		485		490		495
170	Leu Leu Leu Arg Thr Leu Trp Val Gln Phe Cys Leu Leu Phe Trp					
171		500		505		510
172	Leu Ala Ala His Leu Gln Arg Phe Phe Leu Phe Pro Arg Thr Thr					
173		515		520		525
174	Gln Arg Leu Arg Asn Gln Ser Phe Pro Val Ala Phe Ser Arg Lys					
175		530		535		540
176	Ala Gly Gly Phe Gly Asp Glu Lys Cys Phe Leu Cys Val Glu Gly					
177		545		550		555
178	Trp Cys Ser Ser Leu His Val Pro Leu Asn Gly Arg Lys Pro Ala					
179		560		565		570
180	Gly Val Leu Thr Ala Leu Pro Gly Asn Pro Glu His Leu Gly Met					
181		575		580		585
182	Lys Ser Ser Leu Trp Val Leu Phe Asn Ser Tyr Tyr Cys Pro Gln					
183		590		595		600
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194	1 5 10 15					

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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199	Tyr	Arg	Thr	Leu	Arg	Gln	Cys	Val	Ala	Gly	Lys	Glu	Thr	Asn	Phe
200					50					55					60
201	Ser	Leu	Ala	Ser	Gly	Leu	Glu	Ala	Lys	Asp	Glu	Cys	Arg	Ser	Ala
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208					110					115					120
209	Tyr	Glu	Pro	Val	Asn	Ser	Arg	Leu	Ser	Asp	Ile	Phe	Arg	Val	Val
210					125					130					135
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212					140					145					150
213	Asp	Ala	Ala	Lys	Ala	Cys	Asn	Leu	Asp	Asp	Ile	Cys	Lys	Lys	Tyr
214					155					160					165
215	Arg	Ser	Ala	Tyr	Ile	Thr	Pro	Cys	Thr	Thr	Ser	Val	Ser	Asn	Asp
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222					215					220					225
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224					230					235					240
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228					260					265					270
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241	Thr	Thr	Thr	Thr	Ala	Leu	Arg	Val	Lys	Asn	Lys	Pro	Leu	Gly	Pro
242					365					370					375
243	Ala	Gly	Ser	Glu	Asn	Glu	Ile	Pro	Thr	His	Val	Leu	Pro	Pro	Cys
244					380					385					390

VERIFICATION SUMMARY
PATENT APPLICATION US/09/272,835

DATE: 03/31/1999
TIME: 13:59:50

Input Set: I272835.RAW

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